

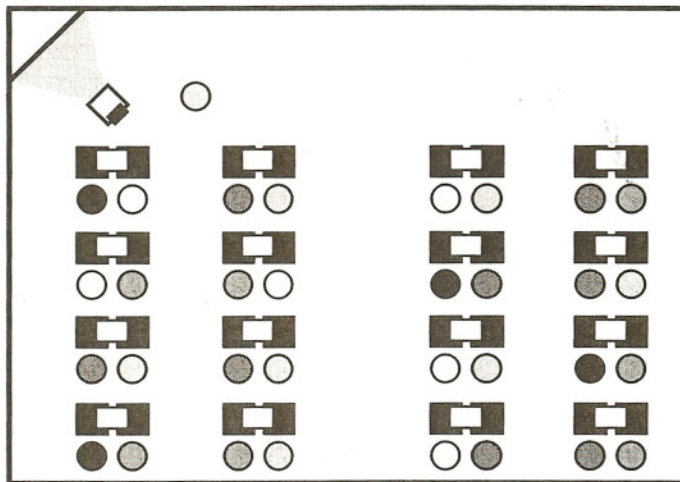


Mapping the Physiographic Features of Latin America

Social Studies Skill Builder

Overview

This **Social Studies Skill Builder** activity allows students to identify important physiographic features of Latin America. Working in pairs, students receive cards, each of which contains a question about a physiographic feature of Latin America, such as the Plateau of Mexico, the Andes Mountains, or the Amazon River. Students use an atlas to determine the answers to the geography questions and then label the physiographic features on a blank map of Latin America. Afterward, the class reviews the answer to each question and examines the extent to which the physiography of Latin America is diverse or uniform.



Procedures at a Glance

Before class, divide students into mixed-ability pairs. Explain to students what *physiographic feature* means. Tell them they will learn about and identify 20 major physiographic features of Latin America. Pass out **Student Handout 1A** to each student, and give each pair one question from **Student Handout 1B**. Have pairs read the question, consult an atlas to determine the answer, and label their maps. Check pairs' answers, and then give them a new question to work on. Continue this until all pairs have completed labeling the map. Have pairs come to the front of the class, read their question, and label the answer on **Overhead Transparency 1A**. Finally, have students answer a series of questions about Latin America and determine to what extent the physiography of Latin America is diverse or uniform.

Procedures in Detail

1. In this activity students identify important physiographic features of Latin America—such as the Plateau of Mexico, the Andes Mountains, and the Amazon River. The activity prepares students to discuss whether Latin America as a region is more diverse or more uniform.
2. Before class, divide students into mixed-ability pairs. Prepare an overhead transparency that shows students who their partners are and how to arrange their desks. Project the transparency, and ask students to move into their correct places.
3. Tell students that this activity is designed to help them identify important physiographic features of Latin America and to determine whether those features make the region diverse or uniform. Explain to students what a *physiographic feature* is.

Physio means “physical,” graphic means “written down or recorded,” and feature means “a particular characteristic of something.” Thus, a physiographic feature is a physical characteristic of the land—a lake, a mountain, a river, a desert—that is recorded on a map.

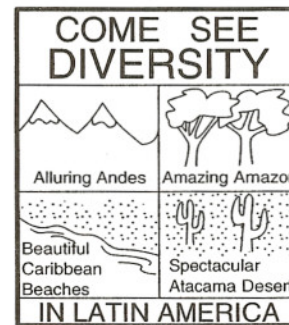
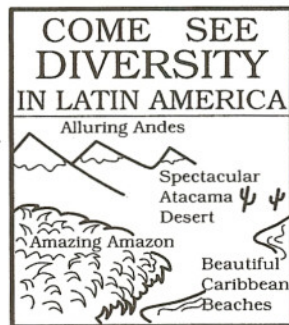
4. Once students understand the definition of this term, they are ready to map the major physiographic features of Latin America. Pass out **Student Handout 1A: Physiographic Map of Latin America** to each student. Have each pair open a textbook or an atlas to a physical map of Latin America. Then give each pair one question from **Student Handout 1B: Mapping Questions**.
5. Have pairs read the question, write it on the back of their maps or in their notebooks, and write their answer next to the question. Then have pairs label the physiographic feature on the map, using symbols that correspond with the map’s key. When a pair finishes with a mapping question, have one student bring the question and both copies of **Student Handout 1A** to you. Use **Teacher’s Guide 1A** to check their answers for accuracy and thoroughness. Award them points (optional), and give the pair a new mapping question. Before students begin working, you may want to model these steps with the class.
6. When most pairs have answered most of the mapping questions, tell them that the question on which they are working is the one they will present to the class. Give them a few extra minutes to make sure they have accurately answered the question and have labeled the feature on their maps. Project **Overhead Transparency 1A: Physiographic Map of Latin America**. Ask the “experts” on Question 1 to come forward, read their question aloud, and label the answer on **Overhead Transparency 1A**. Use the **Teacher’s Guide to Physiographic Features** to provide students with additional information about the Rio Grande. Repeat this process for each of the remaining mapping questions.

Wrap Up

- Once students have completed their maps, hold a class discussion about the physiography of Latin America. Focus the discussion on these questions:
 - If you were to group Latin America into distinct geographical regions, what would they be? Why? (Note: Explain to students that Latin America is divided into four geographical regions—North America, Central America, the Caribbean, and South America—and optionally have them label the regions on their maps.)
 - Which physiographic features reveal uniformity in Latin America? Diversity?
 - Overall, does Latin America appear to be more physiographically diverse or more uniform?



Idea for Student Response: On the left side of their notebooks, have students create a poster advertising a travel tour celebrating Latin America's geographic diversity. Have them choose the four stops on the tour that best represent the region's geographic diversity. Posters must include a bold title, a visual for each of the four stops, a catchy slogan to entice tourists, and other creative touches common in print advertisements. Here are examples of what a student might produce:



Teacher's Guide to Physiographic Features

Question 1: Rio Grande

The Rio Grande, known to Mexicans as the Rio Grande del Norte, is a 1,885-mile-long river flowing across the southwestern United States and Mexico. Its source is in the San Juan Mountains in Colorado, from where it winds through New Mexico, along the Texas-Mexico border, and empties into the Gulf of Mexico at Matamoros, Mexico and Brownsville, Texas. Most of the river is unnavigable due to its shallow, winding path through steep canyons. Dams and reservoirs along the Rio Grande provide water for irrigation and drinking.

Question 2: Andes Mountains

The Andes Mountains stretch along the western edge of the entire continent of South America, forming the world's longest contiguous mountain range, and reach greater heights—above 22,000 feet—than any other range besides the Himalayas. The highest range of the Andes is on the central and northern Argentina-Chile border, where Aconcagua, the highest mountain of the Western Hemisphere, is located. In Bolivia and Peru, the Andes system widens out to high plateau country. One section of the Peruvian Andes hosts Machu Picchu, the ruins of a sacred site for the Inca that contains fine examples of Inca architecture and stone masonry.

Question 3: Sierra Madre Occidental

The Sierra Madre Occidental is the western part of the main mountain range of Mexico, which also includes the Sierra Madre Oriental and the Sierra Madre del Sur. The Sierra Madre Occidental extends south from Arizona and parallels the Pacific Coast for about 1,000 miles. The Sierra Madre Oriental and the Sierra Madre Occidental meet south of the Plateau of Mexico. There are many deep, steep-sided canyons in the range, as well as precious metals such as iron ore, lead, silver, and gold.

Question 4: Plateau of Mexico

The Plateau of Mexico is 700 miles long and 4,000 to 8,000 feet high. Enclosed by the Sierra Madre Oriental to the east and the Sierra Madre Occidental to the west, the plateau contains several drainage basins that support some of Mexico's major cities. The northern section of the plateau is high and arid and is principally used for raising livestock. The deserts of the south yield to the broad, shallow lakes of the Valley of Mexico, where the historical site of Teotihuacan and the modern Mexico City are located.

Question 5: Guiana Highlands

The Guiana Highlands is a mountainous plateau covered with dense vegetation. Located near the northern coast of South America, the Guiana Highlands are bounded by the Orinoco and Amazon river basins. Numerous rivers, fed by heavy rainfall, rise in the highlands and pour over the edges to create deep gorges and spectacular waterfalls. The tropical rainforest that covers much of the highlands supports many varieties of brilliantly colored tropical birds and an array of other fauna. The region is also rich with minerals, including iron ore, gold, and diamonds.

Question 6: Lake Maracaibo

Lake Maracaibo is located in northwest Venezuela and serves as a major transportation route for products of the Colombian-Venezuelan highlands. Lying in the hot, humid lowlands of the Maracaibo basin, the lake is enclosed by mountains. Lake Maracaibo is the largest lake in South America at 5,100 square miles. The production of petroleum is the main industry in the area.

Question 7: Orinoco River

The Orinoco River begins in the Guiana Highlands in south Venezuela and forms a wide arc as it flows along the Venezuela-Colombia border and then out to the Atlantic Ocean. It passes 1,500 to 1,700 miles through rainforests and savannas, ending in a marshy delta where it meets the ocean. The Ature and Maipures Cataracts (waterfalls) divide the upper and lower parts of the river. Most of the Orinoco is navigable and is used for shipping and transport vessels.

Question 8: Yucatán Peninsula

The Yucatán Peninsula separates the Gulf of Mexico from the Caribbean Sea. Located in southeastern Mexico, it has a tropical climate and hosts extensive hardwood forests and tropical wildlife. The main industries on the peninsula include *henequen* (a hard fiber used for mats and ropes) cultivation, fishing, lumber, and tourism.

Question 9: Amazon River

Reaching 3,900 miles from its headwaters in the Andes Mountains to its outlet at the Atlantic Ocean near Belém, Brazil, the Amazon is the world's second-longest river after the Nile. The Amazon carries more water than any other river in the world. As it travels east from the Andes, the Amazon passes through the largest rainforest in the world, which covers 35 percent of South America's total land area.

Question 10: Sierra Madre Oriental

The Sierra Madre Oriental is the eastern part of the main mountain range of Mexico, which also includes the Sierra Madre Occidental and the Sierra Madre del Sur. The Sierra Madre Oriental begins just south of the Rio Grande near the United States border, and it runs southeast for 700 miles parallel to the coast of the Gulf of Mexico. The Sierra Madre Oriental and the Sierra Madre Occidental enclose the Plateau of Mexico, meeting in the southeast of the plateau. Mexico's highest peak, which is in this range, reaches a height of 18,700 feet.

Question 11: Lake Titicaca

Lake Titicaca, a traditional center of Andean culture, is located in the Andes on the Peru-Bolivia border. At 12,500 feet above sea level, Lake Titicaca is one of the highest large lakes in the world. It is the third-largest lake in Latin America (3,200 square miles). The relatively high, constant temperature of the lake water (51°F/11°C) enables local people to grow maize and wheat. The lake's islands of Titicaca and Coati are the legendary birthplace of the Inca, and ruins can still be found there.

Question 12: Gran Chaco

Gran Chaco is a lowland plain located in central South America. Extending 250,000 square miles, Gran Chaco is divided among Paraguay, Bolivia, and Argentina. The land in Gran Chaco is dry, becoming swampy during the rainy period, and is consequently sparsely populated. Oil is one of the few products exploited from this area.

Question 13: Patagonia

Patagonia is a 300,000-square-mile region located primarily in southern Argentina. Most of the region is formed by a wide, windswept, semiarid plateau that slopes gently up to the east, ending in cliffs along the Atlantic Ocean. Sheep raising for wool has been the principal industry of Patagonia, though oil is increasingly important in the region.

Question 14: Pampas

The Pampas are wide, grassy plains of Argentina that extend into Uruguay. They cover roughly 300,000 square miles and have been used for cattle grazing since the 1550s by Portuguese and Spanish settlers. In the second half of the nineteenth century, European farmers immigrated to the area and brought the land under cultivation. Agriculture remains the chief economic activity of modern-day Pampas in Argentina, which exports wheat, corn, flax, and oats.

Question 15: Atacama Desert

The Atacama Desert is located in northern Chile, stretching south from the Peruvian border. It is bordered to the east by the Andes Mountains and to the west by the coastal mountains along the Pacific Ocean. This 600-mile-long stretch has virtually no vegetation, and some parts have never received measurable rainfall. The desert has been mined for nitrates and copper, and agriculture is restricted to very narrow strips of arable land.

Question 16: Amazon Basin

The Amazon Basin consists of the huge area—approximately 35 percent of South America—in which water funnels into the Amazon River. The basin covers most of northern Brazil and parts of Bolivia, Peru, Ecuador, Colombia, and Venezuela. The immense rainforest that covers most of the basin is rich in plant and animal life and natural resources. Scientists have estimated that the vegetation in this rainforest produces half of the world's supply of oxygen.

Question 17: Lake Nicaragua

Lake Nicaragua is located in southwest Nicaragua and is the largest lake in Central America, measuring 3,089 square miles. The San Juan River drains the lake's water into the Caribbean Sea. The lake was once part of the sea and was formed when the land rose, leaving several small islands and volcanoes in the lake. Fish commonly found only in saltwater, such as tuna and sharks, adapted to and live in the freshwater of Lake Nicaragua.

Question 18: Rio de la Plata

Rio de la Plata is an estuary formed by the Paraná and Uruguay Rivers along the southeast coast of South America. Located between Argentina and Uruguay, the estuary is 170 miles long, opening from 20 miles at its head to 120 miles at its mouth at the Atlantic Ocean. The capital cities of Buenos Aires, Argentina and Montevideo, Uruguay are located along the Rio de la Plata.

Question 19: Tierra del Fuego

Tierra del Fuego is an archipelago (chain of islands) at the southern tip of South America, separated from the mainland by the Strait of Magellan. The narrow waterways between the islands of the archipelago are known for being treacherous to navigate. This 28,476-square-mile area is used mainly for sheep farming and oil drilling and is divided between Chile and Argentina.

Question 20: Isthmus of Panama

The Isthmus of Panama is a narrow strip of land (approximately 40 miles wide) that makes up the country of Panama and connects Central and South America. The isthmus hosts the Panama Canal, a waterway built by the United States that connects the Caribbean Sea and the Pacific Ocean. With rugged mountains to the west and lower mountains to the east, the Isthmus of Panama has a tropical climate with abundant rainfall.

Physiographic Map of Latin America



Physiographic Map of Latin America



Physiographic Map of Latin America



Mapping Questions

1. What river cuts through the desert and forms a border between Mexico and the United States?

2. What mountains in the western portion of South America run roughly parallel to the Pacific Coast for more than 5,000 miles?

3. What is the main mountain range in western Mexico that runs roughly parallel to the Pacific Coast?

4. What is the huge plateau that covers most of central Mexico and is surrounded by mountains?

5. What are the highlands in the northern portion of South America that separate Venezuela, Suriname, and French Guiana from Brazil?

6. What is the large lake in the northern tip of South America that has a small opening into the Atlantic Ocean?

7. What is the major river in the northern portion of South America that winds from the Guiana Highlands to the Atlantic Ocean?

8. What is the large peninsula in Mexico that extends into the Gulf of Mexico?

9. What is the long river in South America that winds from Peru through northern Brazil and empties into the Atlantic Ocean?

10. What is the main mountain range in eastern Mexico that begins south of the Rio Grande?

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11. What lake is located high in the Andes Mountains and forms part of the border between Peru and Bolivia?
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12. What is the plain that extends through northern Argentina, Paraguay, and southern Bolivia?
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13. What is the plateau located in southern Argentina between the Andes Mountains and the Atlantic Ocean?
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14. What is the plain that covers most of central Argentina?
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15. What is the desert located in northern Chile that is bordered by the Pacific Ocean to the west and the Andes Mountains to the east?
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16. What is the vast river basin that covers most of northern Brazil and parts of Bolivia, Peru, Ecuador, Colombia, and Venezuela?
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17. What is the large lake located in southwest Nicaragua that drains into the Caribbean Sea?
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18. What is the estuary (place where a river meets the sea) on the southeast coast of South America formed by the meeting of the Paraná and Uruguay Rivers?
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19. What is the archipelago (chain of islands) located at the southern tip of South America and divided between Chile and Argentina?
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20. What is the isthmus (narrow strip of land) that connects Central and South America?
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